

CLAIMS

What is claimed is:

1. A method, comprising:
 - setting license parameters associated with at least one network resource, including using load-balancing criteria in conjunction with the license parameters;
 - receiving a request to access the network resource;
 - determining if the license parameters will permit the requested access to the network resource; and
 - granting the requested access to the network resource if it is determined that the license parameters permit the requested access to the network resource and providing access based at least in part on the load-balancing criteria.
2. The method of claim 1 wherein setting the license parameters associated with the network resource includes setting license parameters associated with an application available from at least one server.
3. The method of claim 1 wherein setting the license parameters associated with the network resource includes specifying a limit on a number of licensed connections for a plurality of servers.
4. The method of claim 1 wherein setting the license parameters associated with the network resource includes allocating licensed access to a plurality of mail servers based on usernames.
5. The method of claim 4 wherein determining if the license parameters will permit the requested access to the network resource includes:

performing a first handshake procedure between a proxy and a client that provided the request and which is associated with a username;

determining which of the plurality of mail servers is allocated to the client's username;

performing a second handshake procedure between the proxy and the mail server that is allocated to the client's username; and

providing the client with access to that mail server after successful completion of the second handshake procedure.

6. The method of claim 1 wherein setting the license parameters associated with the network resource includes allocating licensed access to mail servers based on geographic information associated with users that request access to the network resource.

7. The method of claim 1, further comprising keeping at least one of a local log or syslog to track information associated with licensed connections to the network resource.

8. The method of claim 7, further comprising providing third-party access to at least one of the local log or syslog to allow licenses associated with the tracked information stored therein to be remotely managed or monitored.

9. The method of claim 1, further comprising providing a warning message if a limit of licensed connections is getting near.

10. The method of claim 1, further comprising arranging a plurality of network resources and their associated license parameters according to a master/slave and parent/child arrangement.

11. The method of claim 1 wherein setting the license parameters includes arranging licenses according to a hierarchical arrangement.

12. A system, comprising:

- a means for setting license parameters associated with at least one network resource, including a means for using load-balancing criteria in conjunction with the license parameters;
- a means for receiving a request to access the network resource;
- a means for determining if the license parameters will permit the requested access to the network resource; and
- a means for granting the requested access to the network resource if it is determined that the license parameters permit the requested access to the network resource and for providing access based at least in part on the load-balancing criteria.

13. The system of claim 12 wherein the means for setting the license parameters associated with the network resource includes a means for setting license parameters associated with an application available from at least one server.

14. The system of claim 12 wherein the means for setting the license parameters associated with the network resource includes a means for specifying a limit on a number of licensed connections for a plurality of servers.

15. The system of claim 12 wherein the means for setting the license parameters associated with the network resource includes a means for allocating licensed access to a plurality of mail servers based on usernames, and wherein the means for determining if the license parameters will permit the requested access to the network resource includes:

- a means for performing a first handshake procedure between a proxy and a client that provided the request and which is associated with a username;

a means for determining which of the plurality of mail servers is allocated to the client's username;

a means for performing a second handshake procedure between the proxy and the mail server that is allocated to the client's username; and

a means for providing the client with access to that mail server after successful completion of the second handshake procedure.

16. The system of claim 12, further comprising:

a means for tracking information associated with licensed connections to the network resource; and

a means for providing access to the tracked information.

17. The system of claim 12, further comprising a means for warning if a limit of licensed connections is being at least approached.

18. The system of claim 12, further comprising means for arranging a plurality of network resources and their associated license parameters, wherein at least some of these network resources and their associated license parameters can be arranged to allow license management independently of any load balancing.

19. A system, comprising:

a network component;

a plurality of network resources coupled to the network component;

license parameter settings accessible by the network component and indicative of a number of licensed connections permitted to the network resources; and

a data repository to store data associated with licensed connections to the network resources, wherein the network component can allow access to at least one of the network resources based at least in part on the license parameter settings and on some of the data stored in the data repository.

20. The system of claim 19 wherein the network component comprises at least one of a switch, router, computer, and network device.

21. The system of claim 19 wherein the data repository comprises a syslog server that can be remotely accessed to view the data stored therein.

22. The system of claim 19 wherein the network component can send license report information representative of the data stored in the data repository.

23. The system of claim 19 wherein the plurality of network resources comprises a plurality of mail servers, each of the mail servers being allocated according to username ranges.

24. The system of claim 23 wherein the network component can perform a first handshake process with a client requesting access to one of the mail servers that corresponds to a username for that client, and can perform a second handshake with that mail server and complete connection between the client and that mail server.

25. The system of claim 19, further comprising a security component to control remote access to the data stored in the data repository.

26. The system of claim 19 wherein the plurality of network resources and their corresponding license parameter settings are arranged based on master/slave and parent/child relationships.

27. The system of claim 26, further comprising a security component to provide authentication for the network resources that are arranged based on the master/slave and parent/child relationships.

28. The system of claim 19 wherein the network component can further load balance connections to the network resources

29. The system of claim 19 wherein the license parameter settings are based on a hierarchical arrangement of licenses.

30. An article of manufacture, comprising:
a machine-readable medium having instructions stored thereon to:
set license parameters associated with at least one network resource;
determine if the license parameters will permit a requested access to the network resource; and
grant the requested access to the network resource if it is determined that the license parameters permit the requested access to the network resource.

31. The article of manufacture of claim 30 wherein the instructions to set the license parameters associated with the network resource include instructions to allocate licensed access to a plurality of mail servers based on usernames, and wherein the instructions to determine if the license parameters will permit the requested access to the network resource include instructions to:
perform a first handshake procedure between a proxy and a client that provided the request and which is associated with a username;
determine which of the plurality of mail servers is allocated to the client's username;
perform a second handshake procedure between the proxy and the mail server that is allocated to the client's username; and
provide the client with access to that mail server after successful completion of the second handshake procedure.

32. The article of manufacture of claim 30 wherein the machine-readable medium further includes instructions stored thereon to load balance licensed connections to requested network resources.

33. The article of manufacture of claim 30 wherein the machine-readable medium further includes instructions stored thereon to track licensed connection information and to present the tracked information.

34. The article of manufacture of claim 30 wherein the machine-readable medium further includes instructions stored thereon to use load-balancing criteria in conjunction with the license parameters to determine if the requested access to the network resource will be permitted.